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(FILE 'HOME' ENTERED AT 23:47:56 ON 25 JUN 2002)

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISALERTS, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIODASE, ...' ENTERED AT 23:48:16

ON

25 JUN 2002

L1

CITRIC

112 SEA (CALCIUM OR (CALCIUM AND MAGNESIUM)) AND ((ACID? OR

OR MALIC OR CALCIUM) (10A) (EQ OR EQUIV?)) AND (INULIN? OR FRUCTOOLIGOSACC? OR FRUCTO-OLIGOSACC?)

L2

D3

30 SEA L1 AND (ISOFLAVONE OR VITAMIN D OR VITAMIN K OR VITAMIN

OR VITAMIN D".SUB."3 OR MALTOL OR CARRAGEENAN OR MALTODEXTRIN OR MALTO DEXTRIN OR XANTHAN GUM OR VITAMIN E OR DAIDZEIN OR GENISTEIN OR GLYCITEIN)

L3

29 DUP REM L2 (1 DUPLICATE REMOVED)

D 1-29

D 13 KWIC

L4

82 SEA L1 NOT L2

L5

82 DUP REM L4 (0 DUPLICATES REMOVED)

D 1-82

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ACCESSION NUMBER: 1993:448289 CAPLUS
 DOCUMENT NUMBER: 119:48289
 TITLE: Effects of **fructooligosaccharides** and other
 saccharides on **calcium**, **magnesium**,
 and **phosphorus** absorption in rats
 AUTHOR(S): Ohta, Atsutane; Osakabe, Naomi; Yamada, Kazuhiko;
 Saito, Yasuhiro; Hidaka, Hidemasa
 CORPORATE SOURCE: Biosci. Lab., Meiji Seika Kaisha, Ltd., Sakado,
 350-02, Japan
 SOURCE: Nippon Eiyo, Shokuryo Gakkaishi (1993), 46(2), 123-9
 CODEN: NESGDC; ISSN: 0287-3516
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 CLASSIFICATION: 18-4 (Animal Nutrition)

ABSTRACT:

The effects of administration of lactose (LA), **fructooligosaccharides** (FO) and other oligosaccharides in the diet on absorption of Ca, Mg, and P in weanling male rats were examd. by in vivo studies. In rats fed the FO diet, Ca, Mg, and P absorption was significantly higher than in rats fed the LA diet. FO had a dose-dependent effect on mineral absorption. The enhancement of Ca, Mg, and P absorption by FO persisted for 1 mo. A significant increase in the ash and mineral contents of the femur was obsd. in rats fed the FO diet as compared with controls. FO had a pos. effect on mineral absorption. Galactooligosaccharides and raffinose had similar but variable effects. Isomaltoligosaccharides had no effect. There was a pos. correlation between mineral absorption and L-lactate concn. in the cecum. L-Lactate concn. in the cecum might have a direct effect on mineral absorption.

SUPPL. TERM: mineral absorption **fructooligosaccharide** lactose
 diet; oligosaccharide diet mineral absorption
 INDEX TERM: Mineral elements
 ROLE: BIOL (Biological study)
 (of femur, dietary oligosaccharides effect on)
 INDEX TERM: Biological transport
 (absorption, of minerals, dietary oligosaccharides effect
 on)
 INDEX TERM: Intestine, composition
 (cecum, org. acids and pH of, dietary
 oligosaccharides effect on)
 INDEX TERM: Bone, composition
 (femur, mineral compn. and wt. of, dietary
 oligosaccharides effect on)
 INDEX TERM: Oligosaccharides
 ROLE: BIOL (Biological study)
 (fructose-contg., mineral absorption response to dietary)
 INDEX TERM: Oligosaccharides
 ROLE: BIOL (Biological study)
 (galactose-contg., mineral absorption response to
 dietary)
 INDEX TERM: Oligosaccharides
 ROLE: BIOL (Biological study)
 (isomaltose-contg., mineral absorption response to
 dietary)
 INDEX TERM: 7439-95-4, **Magnesium**, biological studies
 7440-70-2, **Calcium**, biological studies
 7723-14-0, **Phosphorus**, biological studies
 ROLE: BIOL (Biological study)
 (absorption of, dietary oligosaccharides effect on)
 INDEX TERM: 63-42-3, Lactose 512-69-6, Raffinose 125692-63-9,
 Meiologo P 129038-02-4, Cup Oligo P 148465-13-8,
 Isomalto 900P
 ROLE: BIOL (Biological study)

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(mineral absorption response to dietary)
INDEX TERM: 64-19-7, Acetic acid, biological studies 79-09-4,
Propionic acid, biological studies 79-33-4, L-Lactic acid,
biological studies 107-92-6, Butyric acid, biological
studies 10326-41-7, D-Lactic acid, biological studies
ROLE: BIOL (Biological study)
(of cecum, dietary oligosaccharides effect on)

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